

NETL Merit Staffing Vacancy Announcement

U.S. DEPARTMENT OF ENERGY - NATIONAL ENERGY TECHNOLOGY LABORATORY (NETL)

ANNOUNCEMENT NO.: NETL-04-44

OPENING DATE: 10/01/2004

CLOSING DATE: 10/22/2004

POSITION: Petroleum Engineer, GS-0881-14

LOCATION: Office of Science, Technology and Analysis, Geosciences Division
Morgantown, WV

SUBJECT TO:

Employment and Financial Disclosure Statement
Agreement Covering Discoveries, Inventions and Improvements
DOE CTAP (See Attached)
DOE ICTAP (See Attached)
1st Year Probationary Period (See Notes)

PROMOTION POTENTIAL: None

SALARY RANGE: (Includes locality pay)

GS-14: \$82,438 - \$107,170 per annum

AREA OF CONSIDERATION: Government-Wide - Federal Career/Career Conditional Employees in the Competitive Service and Veterans who are preference eligibles or who have been separated from the Armed Forces under honorable conditions after substantially completing an initial 3-year term.

DUTIES AND RESPONSIBILITIES:

NETL plans to establish a research laboratory that will function as a Center of Excellence for Advanced Drilling, Completion, and Stimulation. The objective of this Center will be to support the oil, natural gas, and carbon sequestration programs of the U.S. DOE FE/NETL through focused laboratory analysis, evaluation, and modeling as well as applied research in related sciences and engineering, primarily drilling, completion, and stimulation. To accomplish this objective, the Laboratory will develop a research facility and expertise in rock, fluid, drilling mechanics, production systems, and related sciences and engineering. This expansion of the NETL R&D capability will provide the missing but critical science to engineer effective and efficient drilling and production of hydrocarbons at depths >20,000 feet and temperatures above 250°C.

The incumbent will play a lead role in planning and establishing this Center and executing specialized research projects within the in-house research and development program in natural gas and petroleum exploration and production, and carbon sequestration. With the assistance of other NETL personnel, the incumbent will participate in establishing an expert merit review group consisting of U.S. operators, service companies, and technology developers to advise on the initial direction for this initiative.

The incumbent will identify research priority needs that utilize the expertise of the in-house research staff and have the potential to increase utilization of unconventional resources and/or improve carbon sequestration

technologies, will develop and justify research plans, and will participate in that research. The incumbent will work closely with a team of geologists, physical scientists and others to develop a scientific understanding of the properties of drilling muds and the nature of the rock cutting process (during oil and gas drilling) under high pressure and high temperature conditions. This will allow more effective and efficient fluids and drilling technologies to be designed. The incumbent will also support research aimed at better understanding the physical nature, increasing the production efficiency, and minimizing the adverse environmental effects of exploration and production. It is anticipated that the incumbent will design and acquire an advanced drilling research facility (ADRF) that has the capability of operating at high pressure (>30,000 psi) and high temperature (>250°C), and that can monitor and record drilling parameters with precision and speed. It is anticipated that the ADRF will be equipped with testing instrumentation and fiber optics to allow researchers to visually observe and record digital data and information and will be able to generate information and samples representative of drilling fluid and core under expected conditions. It is also anticipated that the incumbent will participate in the development of a down-hole high pressure, high temperature simulator and in field testing of any advanced equipment developed.

QUALIFICATION REQUIREMENTS: Applicants must have general and/or specialized experience and any selective placement factors as described below. This requirement is in accordance with the OPM Qualifications Standards Operating Manual, available in any Government Personnel Office, which specifies when and how education may be substituted for the experience.

BASIC REQUIREMENTS FOR ENGINEER:

- A. Degree: Professional engineering. To be acceptable, the curriculum must (1) be in a school of engineering with at least one curriculum accredited by the Accreditation Board of Engineering and Technology (ABET) as a professional engineering curriculum; or (2) include differential and integral calculus and courses (more advanced than first-year physics and chemistry) in five of the following seven areas of engineering science or physics: (a) statics, dynamics; (b) strength of materials (stress-strain relationships); (c) fluid mechanics, hydraulics; (d) thermodynamics; (e) electrical fields and circuits; (f) nature and properties of materials (relating particle and aggregate structure to properties); and (g) any other comparable area of fundamental engineering science or physics, such as optics, heat transfer, soil mechanics, or electronics; OR
- B. If you do not meet the basic engineering requirement above, you may qualify with a combination of education and experience -- college level education, training, and/or technical experience that furnished (1) a thorough knowledge of the physical and mathematical sciences underlying professional engineering and (2) a good understanding, both theoretical and practical, of the engineering sciences and techniques and their applications to one of the branches of engineering. The adequacy of such background must be demonstrated by one of the following:
 - (1) Professional Registration -- Current registration as a professional engineer by any State, the District of Columbia, Guam, or Puerto Rico. Generally, such registration must require a written test. If you qualify for registration by means other than a written test (such as State grandfather or eminence provision), you are eligible only for the specialty field of your registration.
 - (2) Written Test -- Evidence of having successfully passed the Engineer-in-Training (EIT) examination and have completed all the requirements for either (a) a bachelors degree in engineering technology (BET) from an accredited college or university which included 60 semester (90 quarter) hours of courses in the physical, mathematical, and engineering sciences, or (b) a BET from a program accredited by the Accreditation Board for Engineering and Technology (ABET). Eligibility is limited to positions that are within or closely related to the specialty field of the engineering technology program.
 - (3) Specific Academic Courses -- Successful completion of at least 60 semester hours of courses in the physical, mathematical, and engineering sciences and engineering, which included the courses specified in Paragraph A. The courses must be fully acceptable toward meeting the requirements of a professional engineering curriculum as described in Paragraph A.

- (4) Related Curriculum -- Successful completion of a curriculum leading to a bachelors degree in engineering technology or in an appropriate professional field, e.g., physics, chemistry, architecture, computer science, mathematics, hydrology, or geology, may be accepted in lieu of a degree in engineering, provided the applicant has had at least 1 year of professional engineering experience acquired under professional engineering supervision and guidance.

AND

C. Additional Experience Required for Petroleum Engineer: Applicants must have one year of specialized experience equivalent to the next lower grade level in the Federal service which has equipped them with the specific knowledge, skills and abilities to successfully perform the duties of the position, and that is typically in or related to the work of the position to be filled as demonstrated by experience as an engineer in the area of natural gas and/or petroleum exploration and production.

Candidates for advancement within the General Schedule must meet time-in-grade requirements of 5 CFR, Part 300, Subpart F.

BASIS OF EVALUATION: Qualified applicants will be rated against the established quality ranking factors (QRF). The extent to which a candidate possesses each knowledge, skill, and/or ability will be determined by measuring the level of experience, education, and training as they relate to each quality ranking factor. The quality ranking factors listed below have been weighted by the Selecting Official based on their relative importance to the position being filled. DETERMINATION OF THE BEST QUALIFIED GROUP WILL BE BASED SOLELY ON INFORMATION CONTAINED IN THE CANDIDATES APPLICATION PACKAGE; THEREFORE, CANDIDATES ARE REQUESTED TO SPECIFICALLY ADDRESS EACH QUALITY RANKING FACTOR AND HIGHLIGHT THE SIGNIFICANCE OF THEIR SPECIFIC EXPERIENCE. FAILURE TO ADDRESS THE QUALITY RANKING FACTORS MAY RESULT IN A LOWER RATING.

1. Knowledge of the principles and practices of engineering and science related to exploration and production of marginal and unconventional resources and natural fracture systems and the interaction of drilling muds, drill bits, and rock at high pressures and temperatures. (30%)
2. Ability to conduct advanced research and analysis related to drilling, exploration for and production of oil and gas resources, and/or carbon sequestration technology in underground reservoirs. (25%)
3. Ability to identify research needs and formulate research concepts and projects related to natural gas and petroleum exploration and production and specifically physical and chemical phenomena involved in high pressure, high temperature drilling. (30%)
4. Ability to prepare effective communications in the form of peer reviewed journal publications, technical reports, and oral presentations to research and management audiences. (15%)

PERFORMANCE AND AWARDS: In addition to evaluation of the above quality ranking factors, the Selecting Official will also consider each candidates current or last annual performance appraisal and relevant awards as part of the selection process.

NOTES:

The U.S. Department of Energy is an Equal Opportunity Employer.

Relocation expenses may be authorized in accordance with Federal Travel Personnel Regulations. The decision to pay relocation expenses will be determined prior to selection based on budgetary constraints.

Eligible veterans may apply for Merit Promotion Vacancy announcements under the Veterans Employment Opportunities Act of 1998. Recent amendments to the Act provide Veterans with the opportunity, if selected, for career conditional appointments.

Individuals with a disability and 30% disabled veterans may be considered under special hiring authorities.

NETL provides reasonable accommodations to applicants with disabilities. If you need a reasonable accommodation for any part of the application and hiring process, please notify the NETL HR Office. The decision on granting reasonable accommodation will be on a case-by-case basis.

This position is also being announced All Sources (NETL-04-45). Please specify on your application which announcement number(s) you are applying under. Status applicants may apply under either or both vacancy announcements but must specifically identify the vacancy announcement number on each application form.

Those applicants who do not meet the minimum qualification requirements within 30 days of the closing date of the vacancy announcement will be determined to be "not qualified".

You must include your Social Security number on your application.

This position is included in the bargaining unit.

For more information about the National Energy Technology Laboratory (NETL), please visit our website at www.netl.doe.gov. The status of all NETL vacancy announcements can be found at www.netl.doe.gov under career opportunities.

TO APPLY: Submit the following forms and indicate duty location preference. (Note: Applications and any attached materials will not be returned.)

Either a current, completed Personal Qualifications Statement (SF-171), or an Optional Application for Federal Employment (OF-612 – <http://www.opm.gov/Forms/html/of.asp>), or a Resume (which contains specific information outlined on the attachment to this announcement). Reference the vacancy announcement number on application. Electronic version of an application will not be accepted.

Supplementary statement addressing the quality ranking factors which highlights aspects of your background as they relate to the knowledge, skills, and abilities required by the position. Note: Rankings will be based solely on information contained in your application package. Failure to address the quality ranking factors may result in a lower rating.

Annual Performance Appraisal (current).

Notification of Personnel Action (SF-50) (copy/most recent).

College Transcript. (An unofficial copy may be submitted; however, if selected an official copy will be required.)

Declaration of Federal Employment (OF-306, <http://www.opm.gov/Forms/html/of.asp>). This form is required if using the OF-612 or a Resume because it contains a statement certifying that to the best of your knowledge and belief, all of the information on and attached to the OF-306, is true, correct, complete, and made in good faith. False or fraudulent answers to any question on any part of this declaration or its attachments may be grounds for not hiring or for firing after beginning work, and may be punishable by fine or imprisonment.

Submit application material to the following office:

HUMAN RESOURCES DIVISION MS-921-204
U S DEPT OF ENERGY - NETL
626 COCHRANS MILL ROAD
P O BOX 10940
PITTSBURGH PA 15236-0940

Applications must be received by the Human Resources Division on or before the closing date of the vacancy announcement or be postmarked by closing date and received by the Human Resources Division within 5 working days after the closing date. Late applications will not be considered.

Questions regarding this announcement may be addressed to Lisa McCartney at (412) 386-6018 or mccartne@netl.doe.gov.

SPECIAL SELECTION PRIORITY CONSIDERATION FOR SURPLUS OR DISPLACED EMPLOYEES

Department of Energy (DOE) SURPLUS OR DISPLACED EMPLOYEES REQUESTING SPECIAL SELECTION PRIORITY CONSIDERATION UNDER THE CAREER TRANSITION ASSISTANCE PROGRAM (CTAP)

If you are currently a DOE employee who has received a Reduction in Force (RIF) separation notice or a Certificate of Expected Separation you may be entitled to special priority selection under the DOE Agency Career Transition Assistance Program (CTAP). To be eligible for special priority selection under the DOE's Career Transition Assistance Program (CTAP) you must meet all of the following conditions:

1. Displaced Employee is: (A) a current DOE career or career-conditional competitive service employee in tenure Group I or II, at a GS-15 grade level or equivalent and below, who has received a RIF separation notice or notice of proposed removal for declining a directed reassignment or transfer of function outside of the local commuting area; or (B) a current DOE employee in the excepted service, serving on an appointment without time limit, at a GS-15 grade level or equivalent and below, who has been given non-competitive appointment eligibility and selection priority by statute for positions in the competitive service, and who has received a RIF separation notice or notice of proposed removal for declining a transfer of function or directed reassignment outside of the local commuting area.

Surplus Employee is: (A) a current employee serving under an appointment in the competitive service, in tenure Group I or II, at a GS-15 grade level or equivalent and below, who has received a Certificate of Expected Separation (CES) or other official certification issued by DOE indicating that your position is surplus, for example, a notice of position abolishment, or a notice stating that you are eligible for discontinued service retirement; or (B) a current DOE employee serving on an excepted service appointment without time limit, at a GS-15 grade level or equivalent and below, who has been issued a certificate of expected separation or other official agency certification indicating that your position is surplus, for example, a notice of position abolishment or a notice stating that you are eligible for discontinued service retirement, and you have been conferred noncompetitive appointment eligibility and special selection priority by statute for positions in the competitive service.

You must submit one of the following with your application as proof of eligibility for this special selection priority: (A) a copy of the RIF separation notice or notice of proposed removal for declining a directed reassignment or transfer of function outside of the commuting area; (B) Certificate of Expected Separation (CES) or other official notice from DOE indicating that you are surplus or eligible for discontinued service retirement; or (C) other official DOE certification identifying you as being in a surplus organization or occupation.

2. Be applying for a position that is at or below the grade level of the position from which you are being separated. The position must not have a greater promotion potential than the position from which you are being separated.

3. Have a current (or last) performance rating of record of at least fully successful or equivalent. This must be submitted with your application package.

4. Be currently employed by the DOE in the same commuting area of the position for which you are requesting priority consideration; or at DOE's discretion, occupy a position beyond the local commuting area. An eligible DOE employee outside the local commuting area, can only exercise selection priority when there are no eligible surplus and displaced DOE employees within the local commuting area who apply and are found well qualified.

5. File your application by the Vacancy Announcement closing date and meet all the application criteria (e.g., submit all required documentation, etc.).

6. Be rated well-qualified for the position (final score on quality ranking factors is at the acceptable or above level).

DISPLACED EMPLOYEES REQUESTING SPECIAL SELECTION PRIORITY CONSIDERATION UNDER THE INTERAGENCY CAREER TRANSITION ASSISTANCE PROGRAM (ICTAP)

If you are a displaced Federal employee you may be entitled to receive special priority selection under the ICTAP. To receive this priority consideration you must:

1. Be a displaced Federal employee. You must submit one of the following as proof of eligibility for this special selection priority: a Reduction in Force (RIF) separation notice, or a notice of proposed removal for declining a directed reassignment or transfer of function to another commuting area; documentation, e.g., SF-50, Notification of Personnel Action, showing that you were separated as a result of RIF or for declining a transfer of function or directed reassignment to another commuting area; official certification from an agency stating that it cannot place you and your injury compensation has been or is being terminated; official notification from the Office of Personnel Management (OPM) that your disability annuity has been or is being terminated; or official notification from the Military Department or National Guard Bureau that you have retired under 5 United States Code 8337(h) or 8456. The following categories of candidates are considered displaced employees.

A. Current or former career or career-conditional (tenure Group I or II) at the GS-15 grade level or equivalent and below competitive service employees who:

1. Received a specific RIF separation notice; or a notice of proposed removal for declining a directed reassignment or transfer of function outside the local commuting area;
2. Separated because of a compensable injury or illness as provided under the provisions of Subchapter I of Chapter 81 of Title 5, United States Code, whose compensation has been terminated, and whose former agency certifies that it is unable to place; or
3. Retired with a disability under Sections 8337 or 8451 of Title 5, United States Code, and whose disability annuity has been or is being terminated; or
4. Upon receipt of a RIF separation notice retired ON the effective date of the RIF and submits a Standard Form 50 that indicates "Retirement in lieu of RIF"; or
5. Retired under the discontinued service retirement option; or
6. Was separated through reduction in force, or removed for declining a transfer of function or directed reassignment outside the local commuting area.

OR

B. Former Military Reserve or National Guard Technicians who are receiving a special Office of Personnel Management (OPM) disability retirement annuity under Section 8337(h) or 8456 of Title 5, United States Code.

OR

C. A current Executive Branch agency employee in the excepted service, serving on an appointment without time limit, at a GS-15 grade level or equivalent and below, who has been given noncompetitive appointment eligibility and selection priority by statute for positions in the competitive service, and who is in receipt of a reduction in force separation notice or notice of proposed removal for declining a transfer of function or directed reassignment outside the local commuting area.

OR

D. A former Executive Branch agency employee in the excepted service, who served on an appointment without time limit, at a GS-15 grade level or equivalent and below, who has been given noncompetitive appointment eligibility and selection priority by statute for positions in the competitive service, and who has been separated through reduction in force or removed for declining a transfer of function or directed reassignment outside the local commuting area.

2. Be applying for a position at or below the grade level of the position from which you have been separated. The position must not have a greater promotion potential than the position from which you were separated.
3. Have a current (or last) performance rating of record of at least fully successful or equivalent. This must be submitted with your application package. (This requirement does not apply to candidates who are eligible due to compensable injury or disability retirement.)
4. Occupy or be displaced from a position in the same local commuting area of the position for which you are requesting priority consideration.
5. File your application by the Vacancy Announcement closing date and meet all the application criteria (e.g., submit all required documentation, etc.).
6. Be rated well-qualified for the position (final score on quality ranking factors is at the acceptable or above level).

Here's what your resume or application must contain (in addition to specific information requested in the job vacancy announcement):

JOB INFORMATION

Give the following information related to the job for which you are applying.

Announcement number

Title

Grade(s)

Identify the lowest pay or grade level you will accept. (You will not be considered for jobs which pay less than you indicated.)

PERSONAL INFORMATION

Full name

Mailing address (*with ZIP Code*)

Day and evening phone numbers (*with area code*)

Social Security number

Country of citizenship (*Most Federal jobs require United States citizenship.*)

Veterans' preference

Reinstatement eligibility (*If requested, attach SF-50 proof of your career or career-conditional status.*)

Highest Federal civilian grade held (*Also give job series and dates held.*)

EDUCATION

High school

Name, city, and state (ZIP code if known)

Date of diploma or GED

Colleges and universities

Name, city, and state (ZIP code if known)

Majors

Type and year of any degrees received (If no degree, show total credits earned and indicate whether semester or quarter hours.)

Send a copy of your college transcript only if the job vacancy announcement requests it.

WORK EXPERIENCE

Give the following information for your paid and nonpaid work experience related to the job for which you are applying. (*Do not send job descriptions.*)

Job title (*include series and grade if Federal job*)

Duties and accomplishments

Employer's name and address

Supervisor's name and phone number

Starting and ending dates (*month and year*)

Hours per week

Salary

Indicate if we may contact your current supervisor.

OTHER QUALIFICATIONS

Job-related training courses (*title and year*).

Job-related skills, for example, other languages, computer software/hardware, tools, machinery, typing speed

Job-related certificates and licenses (*current only*)

Job-related honors, awards, and special accomplishments, for example, publications, memberships in professional or honor societies, leadership activities, public speaking, and performance awards. (*Give dates but do not send documents unless requested.*)

APPLICANT BACKGROUND SURVEY QUESTIONNAIRE

PRIVACY INFORMATION

General

The information is provided pursuant to Public Law 935-597 (Privacy Act of 1974), December 31, 1974, for individuals completing Federal records and forms that solicit personal information.

Authority

Sections 1302, 3301, 3304, and 7201 of Title 5 of the U.S. Code.

Purpose and Routine Uses

The information from this survey is used for research and for a Federal equal opportunity recruitment program to help ensure that agency personnel practices meet the requirements of Federal law.

Effects of Nondisclosure

Providing this information is voluntary. No individual personnel selections are made based on this information.

GENERAL INSTRUCTIONS

The information from this survey is used to help ensure that agency personnel practices meet the requirements of Federal law. Your responses are **voluntary**. Please answer each of the questions to the best of your ability. Please print entries in pencil or pen. Use only capital letters. Read each item thoroughly before completing the appropriate code number in each box.

Vacancy Announcement No.: NETL-04-44

Date (Month, Day, Year):

Position: Petroleum Engineer, GS-0881-14

Name:

How did you learn about the particular position or exam for which you are applying? (You may circle up to three choices.)

01--Private Information Service

02--Magazine/Newspaper

03--Radio/TV

04--DOE Home Page

05--NETL Home Page

06--OPM USA Jobs

07--Minorities Job Bank

08--Other WEB sites (Specify): _____

09--Hard Copy of Vacancy Announcement

10--Agency Personnel Department

11--FRS-Federal Career Opportunities Listing

12--Federal/State/Local Job Information Center

13--Religious Organization

14--School or College Counselor or Other Official

15--Friend or Relative Working for the Agency

16--Friend or Relative Not Working for Agency

17--State Employment Office (Unemployment Office)

18--Private Employment Office

19--Other (Specify): _____

Please categorize yourself in terms of the race/ethnic category and sex using the definitions below: (Please circle one.)

RACE/ETHNIC CODE:

A--American Indian or Alaskan Native

Person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.

B--Asian or Pacific Islander

Person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.

C--Black, Not of Hispanic Origin

Person having origins in any of the black racial groups of Africa.

D--Hispanic

Person of Mexican, Puerto Rican, Cuban Central or South American, or other Spanish culture or origin, regardless of race.

E--White, Not of Hispanic Origin

Person having origins in any of the original peoples of Europe, North Africa, or the Middle East.

SEX: (Please circle one.)

1--Male

2--Female

DISABILITY STATUS: (Please circle one.)

You may submit this form as part of your application package; however, it will be removed upon receipt and forwarded to NETL's Office of the Economic Impact and Diversity Manager.

Disability Status Codes:

- 05. I do not have a disability.
- 16. Total deafness in both ears, with or without understandable speech.
- 23. Inability to read ordinary size print, not correctable by glasses (can read oversize print or use assisting device).
- 25. Blind in both eyes (no usable vision, may have some light perception).
- 28. Missing one arm or one leg.
- 33. Missing both hands or both arms or both feet or both legs.
- 35. Missing one hand or arm and one foot or leg.
- 64. Partial paralysis of both hands.
- 65. Partial paralysis of both legs, any part, or both arms, any part.
- 67. Partial paralysis of one side of the body, including one arm and one leg.
- 68. Partial paralysis of three or more major parts of the body (arms and legs).
- 71. Complete paralysis of both hands or both arms or both legs.
- 72. Complete paralysis of one arm or one leg.

- 76. Complete paralysis of lower half of body, including legs.
- 77. Complete paralysis of one side of body, including one arm and one leg.
- 78. Complete paralysis of three or more major parts (of body) (arms and legs).
- 82. Convulsive disorder (e.g., epilepsy).
- 90. Mental retardation (a chronic and lifelong condition involving a limited ability to learn, to be educated, and to be trained for useful productive employment as certified by a state vocational rehabilitation agency).
- 91. Mental or emotional illness (a history of treatment for mental or emotional problems).
- 92. Severe distortion of limbs and/or spine (e.g., dwarfism, severe distortion of the back).
- 06. I have a disability, but it is not listed above. Describe: _____